

CLAIMS:

1. A display device (1) comprising a liquid crystal (16) between a first substrate (14) provided with selection electrodes (7) and data electrodes and a second substrate (15) in which picture electrodes at picture elements (8) are present and switching means for connecting the picture electrodes to the selection electrodes and data electrodes and drive means for driving the picture elements in conformity with an image to be displayed, and drive means for driving the selection electrodes which, in the operation condition, within a sequence of m ($m > 1$) time periods, during each time period sequentially selection electrodes during a selection time with selection signals for driving picture elements, the drive means comprising means for driving a group of picture elements during time periods within a sequence of time periods, the driving of different picture elements within a sequence of time periods being phase-shifted with respect to each other.
2. A display device (1) comprising a liquid crystal (16) between a first substrate (14) provided with row or selection electrodes (7) and a second substrate (15) provided with column or data electrodes (6), in which overlapping parts of row and column electrodes define picture elements (8), drive means (5) for driving the column electrodes in conformity with an image to be displayed, and drive means (4) for driving the row electrodes which, in the operating condition, within a sequence of m ($m > 1$) time periods, during each time period sequentially supply groups of p ($p \geq 1$) row electrodes during a selection time with mutually orthogonal selection signals for driving picture elements, the drive means comprising means for driving a group of picture elements during time periods within a sequence of time periods, the driving of different picture elements within a sequence of time periods being phase-shifted with respect to each other.
3. A display device as claimed in claim 1 or 2, in which the phase numbers of the time periods are increased or decreased by one after each sequence of time periods.
4. A display device as claimed in claim 1, 2 or 3, comprising a grayscale table (20) for generating graylevel data in which grayscale table sequences of s ($s > 1$) sequential

graylevels are defined by grouping s sequential graylevels within a sequence, said sequences being allotted to non-sequential selections of time periods within a sequence of time periods.

5. A display device as claimed in claim 4, in which a sequence of selections is
5 allotted to increasing gray values or decreasing gray values.
6. A display device as claimed in claim 5, in which $(s-1)$ increases (or decreases)
of the number of selections within a sequence of selections is allotted to one time period
only.
- 10 7. A display device as claimed in claim 1 or 2, in which a sequence of time
periods is a sequence of frame periods.
8. A display device as claimed in claim 5, comprising means to change the
15 frame-phase of a frame during selection of said frame in subsequent sequences of frame
periods.
9. A display device as claimed in claim 1 or 2, comprising means to apply during
sub-selection times of a selection time different voltages to the column electrodes.
- 20 10. A display device as claimed in claim 1 or 2, comprising means to change the
sub-selection time-phase during selection of a sub-selection time in subsequent sequences of
selection times.
- 25 11. A display device as claimed in claim 1 or 2, the phase shifting being altered
after each sequence of time periods.
12. A display device as claimed in claim 6, in which $p = 1$, the drive means for
driving the column electrodes having means for providing different voltages to the column or
30 data electrodes at sub-selection times of the selection times.
13. A display device as claimed in claim 1 or 2, in which $p = 4$.